

IAA Commission 5
Space Policies, Law, and Economics
2011-2013 Two-Year Plan

- **Scope of Commission 5**

- Global Policy issues : space policies of various space actors, international cooperation and competition, intergovernmental relations, political science, management, social science in general
- Space Law, regulations, scientific-legal liaison
- Economic issues : space economy, developing new space applications, economics of launch systems, financing schemes and business models, commercialization and privatization issues in general
- Space Security and Sustainability, including Space Debris mitigation and legal framework, and Space Weather
- Public Space Travel

- **Role of Commissions (IAA guidelines)**

The role and power of the Commissions is reinforced. The Commissions are directly contributing to the prestige of the Academy work. In addition, they inspire and oversee the stand-alone conferences, the regional meetings, the study groups, the study review, as well as the various IAA permanent Committees. Commissions also contribute to the Heads of Space Agencies Summit follow-on activities. Therefore, the Commission work is far from limited to the preparation of the E3 Symposium held during the annual IAC.

Each Commission conducts twice a year open meetings in order to get fresh ideas, so that it does not work in a vacuum. However, only the ten Commission members are entitled to decide about the scientific activity in their area. The Commission decision mode is by consensus with a quorum of 7. This decision-making process takes place after the open meeting, preferably by email, Skype, etc to allow members of the Commission not present at the meeting to participate in the decision.

- **Commission 5 objectives**

- General

The key words for the activities of Commission 5 will be: pro-activity, interactivity, focus on scientific content.

Commission 5 aims at raising its ability to propose new scientific activities, either through new study groups, or through new conferences, or contribution to conferences organised by other organisation (partnership approach).

In order to do so, a basic guideline will be interactivity, not only between its formal Members, but also with those people who are interested in the Scope of Commission 5, in particular those attending the Commission's open meetings twice a year. The interactivity will be established through a higher focus on scientific content than on administrative matters in the open meetings, but should be pursued on a continuous basis through e-mail exchanges, thus creating an active Commission 5 network. Commission 5 will also reinforce its relations with other IAA Commissions, as well as other organisations that are relevant to its Scope, in particular the United Nations Office of Outer Space Affairs (UNOOSA), the International Institute for Space Law (IISL), the International Society for Photogrammetry and Remote Sensing (ISPRS) and Technical Committees of the International Astronautical Federation (IAF) such as Entrepreneurship and Investment Committee, Space Economy Committee, Committee on Space Security, and other organisations that will be identified.

The scientific content of Commission 5 activities is provided through the Study Groups, and the organisation of conferences by the Programme Committees, as stated in the IAA Bylaws (see Annex). As a consequence, a large part of the discussions, either during the open meetings or through the network, shall be on the plans, proposals, and concrete results from these activities.

- Study Groups

Commission 5 on-going study groups are mainly focused on space sustainability: space debris, space weather. While these topics are quite important, this list is too focused, compared to the broad scope of the Commission.

As a consequence, an urgent action of Commission 5 will be to propose and implement new studies, addressing in particular Global Policy Issues (e.g. exploration, implementation of space agencies strategies, etc.) and Economic Issues (e.g. commercialization, business models, financing, etc.). Partnership with other Commissions, or with external organizations (OOSA, IISL, ISPRS, IAF, and other organizations that will be identified) will be a way to find additional people for these new study groups.

The reporting from the Study Groups should be focused on scientific results (even intermediate), and be delivered 2 weeks before the Commission 5 open meetings (in Spring in Paris, and in October at IAC), in order to allow the Commission 5 management to organise scientific discussions during these meetings.

In addition, for the past 5 years, the Academy has been growing its presence in Africa, connecting with 40 countries on numerous subjects. Commission 5 will also suggest studies that could address their key issues.

- Conferences and Programme committees

In order to avoid Commission 5 meetings becoming too focused on implementation and monitoring of symposia and conferences, the importance of Programme Committees should be reinstated:

- Commission 5 will support and propose IAA Program Committees for the on-going and future conferences under its scope
- Commission 5 will suggest new conferences, in particular any new study topics could lead to a conference upon a Commission's proposal
- Commission 5 will monitor all IAA conferences and identify the ones that could have some policy, law, and economics topics included
- Commission 5 will monitor non-IAA conferences with themes under its scope, to which it could contribute as an associated partner
- Commission 5 will ensure that all Program Committees present their reports at its bi-yearly meetings, the same way all study groups present their reports. It means in particular that these reports shall not be administrative only (attendance, numbers of papers, etc.), but shall have mainly a substantive content through a summary of the highlights presented at the relevant conference.

- Permanent committees

Commission 5 is responsible for the Scientific-Legal Liaison Permanent Committee, whose purpose and scope is to *"foster the communication between the legal and the scientific-technical fields on issues of mutual interest in the realm of astronautics. It shall also ensure a close cooperation between IAA and IISL."*

Commission 5 will explore the possibility to propose other permanent committees, taking into consideration the following criteria: domain justifying recurring and continuous organization of symposia, demanding a specific coordination with other organizations, and addressing a well identified community of experts.

A first identified candidate might be a Space Debris Permanent Committee.

- Keynote presentations during the open meetings

Commission 5 will foster the principle of keynote presentations at its bi-yearly open meetings, by its Members or by external experts, on topics relevant to its scope of activities. These keynote presentations might be a way to start a discussion on the opportunity to start a new study group on the presented topic.

- Heads of Agencies Summit follow-up

During its March 2011 open meeting, Commission 5 has identified the following topics of interest from the Space Summit Declaration:

Human Space Flight:

- . Perform a study to analyze the gaps between the recommendations contained in the Summit Declaration and on-going Exploration plans in space countries.
- . Focus on Public engagement to support a sustainable Human Exploration Program (recommendation 1.7), Invite new and emerging space faring nations to cooperate in Human Spaceflight activities (recommendation 1.8), with a strong link with education and the youth. Such a topic should also involve Commission 6.

Robotic Exploration:

- . Examine legal and policy aspects linked to the implementation of complex missions with multiple flight elements (recommendation 2.4), and making available opportunities for international collaboration in missions with shared instrument payloads (recommendation 2.3)

Climate change:

- . Policies regarding access to data, to information, and of data processing and distribution are transversal to recommendations 3.1 to 3.4 and are a topic of interest to Commission 5
- . Interoperability and common standards are also a transversal issue, with some legal and political aspects

Disaster Management:

- . Same topics as for Climate Change, i.e. data policies and interoperability, are relevant for recommendations made under the area of Disaster Management
- . Higher focus on space telecommunications use after a disaster should be also addressed (as in promoting adherence to the Tampere Convention).

Commission 5 will use this list as one of the drivers to foster the implementation of new Study Groups, and to organize Conferences. In addition, by the end of the year, the Academy will decide on its top Summit priorities and therefore the Commission 5 might have some additional topics to follow on.

- Giving visibility to Commission 5 activities

Commission 5 is intending to increase the visibility of its activities, inside IAA and outside.

The promotion of new Studies, and their subsequent publication is a first natural axis to do so.

For the Conferences, Commission 5 will appoint a Liaison person per conference/program committee, in charge of the reporting. This Liaison person should be involved in the organisation of the event, and attend it, whenever possible. In order to improve the visibility conferences the Liaison person should make sure that photo- and video-materials, as well as publications in mass media related to the event are promptly (within 1 week maximum after the event) transferred to the IAA Secretariat for subsequent upload on the Academy website.

Every IAA study results are systematically presented at the UNCOPUOS meetings either during the subcommittee in February/March or the full committee in June.

Annex : IAA Bylaws Extracts for Commissions, Programme Committees and Study Groups

- 7.1** In order to provide opportunities for initiation of focused activities, to facilitate and observe such activities, enable the exchange of ideas and information among interested members of the Academy and recommend appropriate measures relating to the establishment and activities of Program Committees and Study Groups to the Board of Trustees, six Academy Commissions shall be established, namely: Commission I on Space Physical Sciences; Commission II on Space Life Sciences; Commission III on Space Technology and System Development; Commission IV on Space Systems, Operations and Utilization; Commission V on Space Policy, Law and Economics; Commission VI on Space and Society, Culture and Education. The initial general scopes of responsibility of each of the Academy Commissions are shown for information in Appendix 1 of these Bylaws. The scopes may be amended by majority Board decisions in the future.
- 7.2** The officers of each Academy Commission shall be a Chairperson, a Vice Chairperson and a Secretary. They shall be appointed by the President upon recommendation of the Vice-President for Scientific Activities for a term of two years. The Vice Chairperson shall succeed the Chairperson at the expiration of his term of office. Each Academy Commission shall be composed of one representative from each of the four Sections to be nominated by the respective Chairperson and other members appointed by the President upon the recommendation of the Vice-President for Scientific Activities. The Chairpersons of the relevant Program Committees and Study Groups shall serve as ex-officio members of the respective Academy Commissions. The Chairperson and Vice-Chairpersons of the Academy Commissions shall be selected from among the Members of the Academy, the Secretary and other members of the Commissions may be either Members or Corresponding Members of the Academy.
- 7.3** Academy Commissions may establish ad hoc Advisory Groups to help in reviewing selected study topics.
- 7.4** Upon recommendation of the Vice President for Scientific Activities, the respective Chairperson of an Academy Commission, or petition of at least 15 Members and/or Corresponding Members, the Board shall be empowered to establish appropriate Program Committees and Study Groups. Members and/or Corresponding Members wishing to organize a Program Committee or a Study Group shall submit their proposal to an Academy Commission with the most appropriate scope. Such proposal shall include the terms of reference of the body concerned, the length of time needed for completion of its task, proposed membership, secondary interest in another Academy Commission, if any, and other useful information. If endorsed by the respective Academy Commissions, the proposal shall be transmitted to the Scientific Activities Committee for its approval. The Vice-President for Scientific Activities shall inform the Board of Trustees of the establishment of all Program Committees and Study Groups and shall report on the progress of their work.
- 7.5** The Vice-President for Scientific Activities shall recommend to the President the appointment of the Chairpersons and members of the Program Committees and Study Groups. The Officers of the Program Committees and Study Groups shall be the Chairperson, one or more Co-Chairpersons and a Secretary. The Officers shall be either Members or Corresponding Members. They shall remain in office for the lifetime of the task concerned. The membership of Program Committees and Study Groups shall include Members and Corresponding Members, as well as non-Members who are distinguished in the respective subjects of interest of these bodies.
- 7.6** Each **Program Committee** shall focus on accomplishing specific assignments over a period of time and shall organize conferences, sessions or symposia of the Academy on particular topics. The Terms of Reference for all Program Committees are contained in the reports of the Board of Trustees.
- 7.7** The **Study Groups** shall aim at producing multidisciplinary time-limited studies on various topics, which should result in cosmic study reports and position papers. All such documents shall be subject to approval of the Board of Trustees before releases as official Academy documents. The Study Groups may also convene special symposia.